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  841   aaggatccat gattacctgg aaaaccagga ctacagcacc tgtgcctggg ccattgtcca
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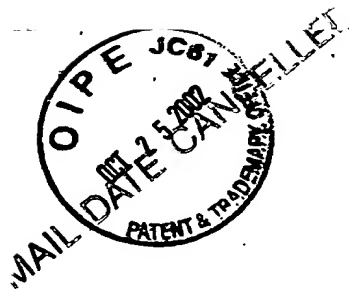
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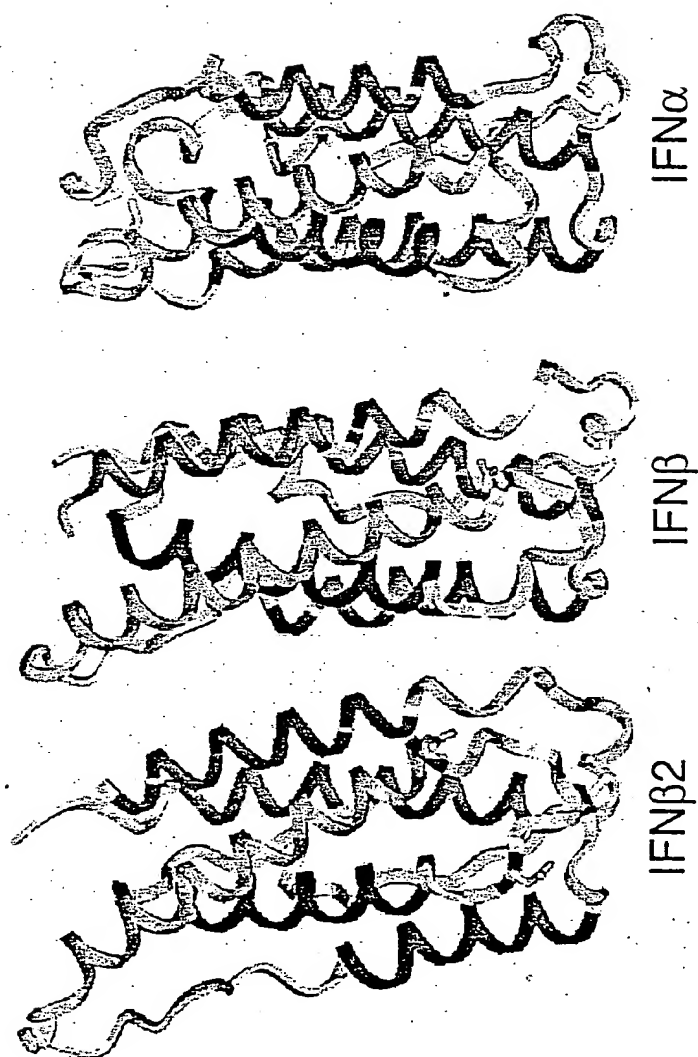YSTCAWAIVQVEISRCLFFVFSLTEKLSKQGRPLNDMKQELTTEFRSPR

**Figure 2**

IFNα

IFNβ

IFNβ2

Figure 3

```
                  1   70
     IFNB2   (1) MILKHFFGTVLVLLASTTIFSLDLKLIIFQQRQVNQESEKLLNKLQ-TLSIQQCLPHRKNFLLPQKSLSP
     IFNB   (1) MTNKCLLQIALLLCFSTTALSMSYNLLGFLQRSSNFQCQKLLWQLNGRLEY--CLKDRMNFDIPEEIKQL
 IFNalpha8   (1) MALTFYLLVALVVLSYKSFSSLGCDLPQTHS-LGNRRALILLAQMR-RISPFSCLKDRHDFEFPQEEFDD
 IFNalpha7   (1) MARSFSLLMVVLVLSYKSICSLGCDLPQTHS-LPNRRALILLAQMG-RISPFSCLKDRHEFRFPEEEFDG
 IFNalpha6   (1) MALPFALLMALVVLSCKSSCSLDCDLPQTHS-LGHRRTMMLLAQMR-RISLFSCLKDRHDFRFPQEEFDG
 IFNalpha5   (1) MALPFVLLMALVVLNCKSICSLGCDLPQTHS-LSNRRTLMEIMAQMG-RISPFSCLKDRHDEGFPQEEFDG
 IFNalpha4b (1) MALSFSLLMAVLVLSYKSICSLGCDLPQTHS-LGNRRAEILLAQMG-RISHFSCLKDRHDFGFPSEEFDG
 IFNalpha21 (1) MALSFSLLMAVLVLSYKSICSLGCDLPQTHS-LGNRRALILLAQMG-RISPFSCLKDRHDFGFPQEEFDG
 IFNalpha2   (1) MALTFALLVALLVLSCKSSCSVGCDLPQTHS-LGSRRTLMLLAQMR-RISLFSCLKDRHDFGFPQEEE-G
 IFNalpha16 (1) MALSFSLLMAVLVLSYKSICSLGCDLPQTHS-LGNRRALILLAQMG-RISHFSCLKDRYDFGFPQEVFDG
 IFNalpha14 (1) MALPFALMMALVVLSCKSSCSLGCNLSQTHS-LNNRRTLMLMAQMR-RISPFSCLKDRHDFEFPQEEFDG
 IFNalpha13 (1) MASPFALLMVLVVLSCKSSCSLGCDLPETHS-LDNRRTLMLLAQMS-RISPSSCLMDRHDFGFPQEEFDG
 IFNalpha10 (1) MALSFSLLMAVLVLSYKSICSLGCDLPQTHS-LGNRRALILLGQMG-RISPFSCLKDRHDFRIPQEEFDG
 IFNomega1   (1) MALLFPLLAALVMTSYSPVGSLGCDLPQNHG-LLSRNTLVLLHQMR-RISPELCLKDRRDFRFPQEMVKG
 IFNgamma   (1) MKYT-SYILAFQLCIVLGSLGCYCQDPYVKE----AENLKKYFNAG----H--SDVADNGTLF--LGILK
 Consensus   (1) MAL F LLMALLVLS KS CSLGCDLPQTHS L NRR L LLAQM RISPFSCLKDRHDF FPQEEFDG

                  71   140
     IFNB2   (70) QQYQKGHTLAILHEMLQQIFSLFRANISLDGWEENHTEKFLIQLHQQLEYLEALMGLEAEKLSGTLGSDN
     IFNB   (69) QQFQKEDAALTIYEMLQNIFAIFRQDSSSTGWNETIVENLLANVYHQINHLKTVLEEKLEKEDFTRGKLM
 IFNalpha8 (69) KQFQKAQAISVLHEMIQQTFNLFSTKDSSAALDETLLDEFYIELDQQLNDLESCVMQEVGVIESPLMYED
 IFNalpha7 (69) HQFQKTQAISVLHEMIQQTFNLFSTEDSSAAWEQSLLEKFSTELYQQLNDLEACVIQEVGVEETPLMNED
 IFNalpha6 (69) NQFQKAEAISVLHEVIQQTFNLFSTKDSSVAWDERLLDKLYTELYQQLNDLEACVMQEVWVGGTPLMNED
 IFNalpha5 (69) NQFQKAQAISVLHEMIQQTFNLFSTKDSSATWDETLLDKFYTELYQQLNDLEACMMQEVGVEDTPLMNVD
 IFNalpha4b (69) HQFQKTQAISVLHEMIQQTFNLFSTEDSSAAWEQSLLEKFSTELYQQLNDLEACVIQEVGVEETPLMNVD
 IFNalpha21 (69) NQFQKAQAISVLHEMIQQTFNLFSTEDSSATWEQSLLEKFSTELNQQLNDMEACVIQEVGVEETPLMNVD
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 IFNomega1 (69) SQLQKAHVMSVLHEMIQQIFSLFHTERSSAAWNMTLLDQLHTGLHQQLQHLETCLLQVVGEGESAGAISS
 IFNgamma   (58) NWKEESDRKIMQSQIVSFYFKLFKNFKD----DQS-IQKSVETIKEDMN-VKFFNSNKKKRDDFEKLTNY
 Consensus (71) NQFQKAQAISVLHEMIQQTFNLFSTKDSSAAWDE LLDKF TELYQQLNDLEACV QEVGVEETPLMN D

                  141   210
     IFNB2 (140) LRLQVKMYFRRIHDYLE-NQDYSTCAWAIVQVEISRCLFFVFSLTEKLSKQGRPLNDMKQELTTEFRSPR
     IFNB   (139) SSLHLKRYYGRILHYLK-AKEYSHCAWTIVRVEILRNFYFINRLTGYLRN--------------------
 IFNalpha8 (139) SILAVRKYFQRITLYLT-EKKYSSCAWEVVRAEIMRSFSLSINLQKRLKSKE-----------------
 IFNalpha7 (139) FILAVRKYFQRITLYLM-EKKYSPCAWEVVRAEIMRSFSFSTNLKKGLRRKD-----------------
 IFNalpha6 (139) SILAVRKYFQRITLYLT-EKKYSPCAWEVVRAEIMRSFSSSRNLQERLRRKE----------------
 IFNalpha5 (139) SILTVRKYFQRITLYLT-EKKYSPCAWEVVRAEIMRSFSLSANLQERLRRKD-----------------
 IFNalpha4b(139) SILAVRKYFQRITLYLT-EKKYSPCAWEVVRAEIMRSFSLSTNLQKRLRRKD-----------------
 IFNalpha21(139) SILAVKKYFQRITLYLT-EKKYSPCAWEVVRAEIMRSFSLSKIFQERLRRKE-----------------
 IFNalpha2 (138) SILAVRKYFQRITLYLK-EKKYSPCAWEVVRAEIMRSFSLSTNLQESLRSKE-----------------
 IFNalpha16(139) SILAVRKYFQRITLYLM-GKKYSPCAWEVVRAEIMRSFSFSTNLQKGLRRKD----------------
 IFNalpha14(139) SILAVKKYFQRITLYLM-EKKYSPCAWEVVRAEIMRSFSFSTNLQKRLRRKD-----------------
 IFNalpha13(139) SILAVKKYFRRLTLYLT-EKKYSPCAWEVVRAEIMRSLSLSTNLQERLRRKE-----------------
 IFNalpha10(139) SILAVRKYFQRITLYLI-ERKYSPCAWEVVRAEIMRSLSFSTNLQKRLRRKD-----------------
 IFNomega1 (139) PALTLRRYFQGIRVYLK-EKKYSDCAWEVVRMEIMKSLFLSTNMQERLRSKDRDLGSS-----------
 IFNgamma (122) SVTDLNVQRKAIHELIQVMAELSPAAKTGKR---KRSQML---FRGRRASQ-----------------
 Consensus (141) SILAVRKYFQRITLYL EKKYSPCAWEVVRAEIMRSFS STNLQ RLRRK
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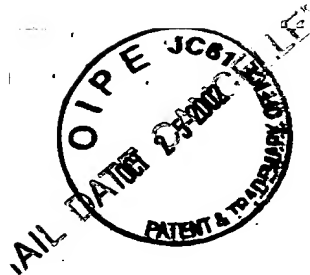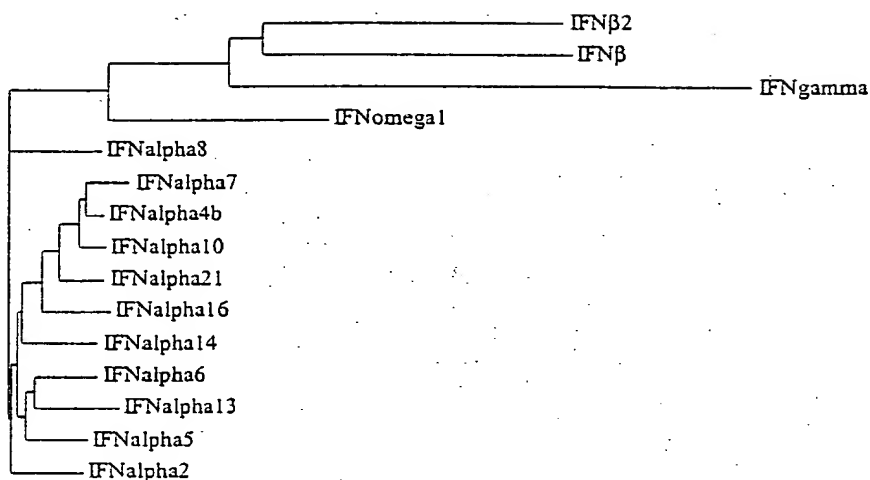
Figure 4

Protein Level Comparison



Nucleotide Level Comparison



Figure 5
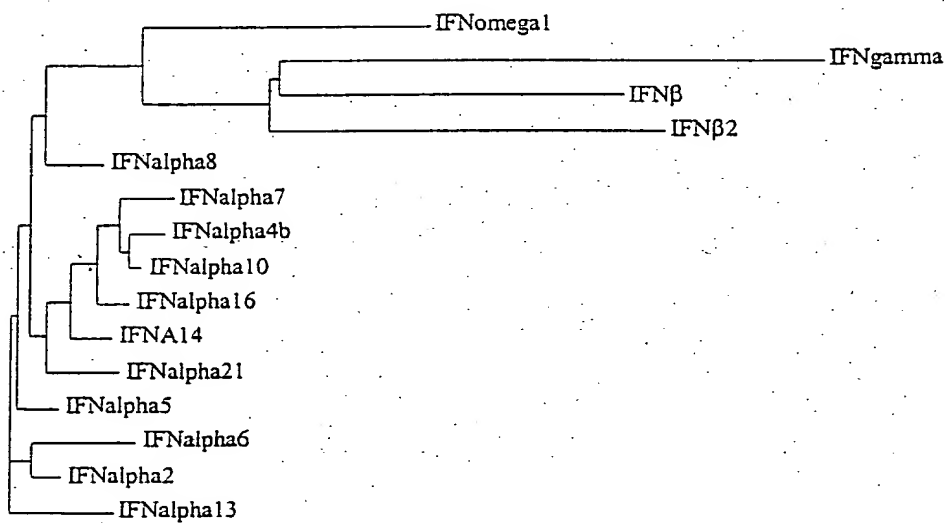
Figure 6

Figure 7

## Panel A
### HT1080 Cells Stimulated with IFN



## Panel B
### HT1080IFNAR2c Cells Stimulated with IFN



Figure 8

24 hours after addition of $^3$H thymidine
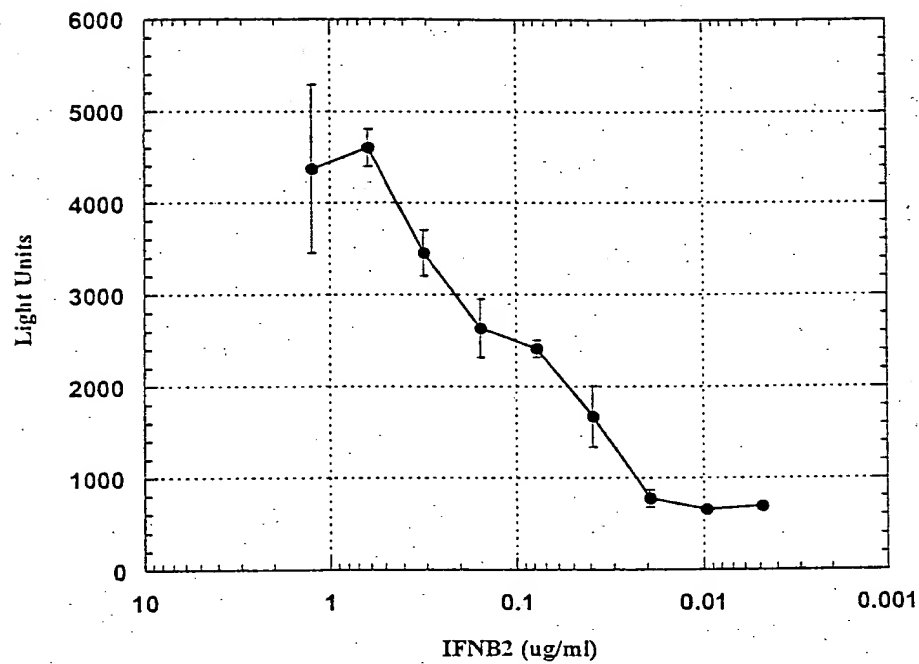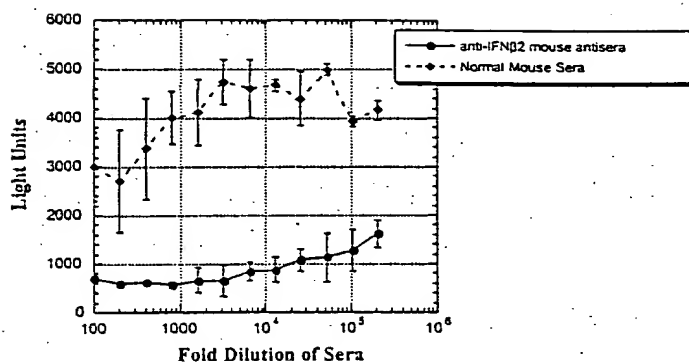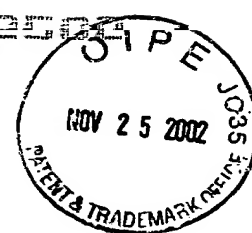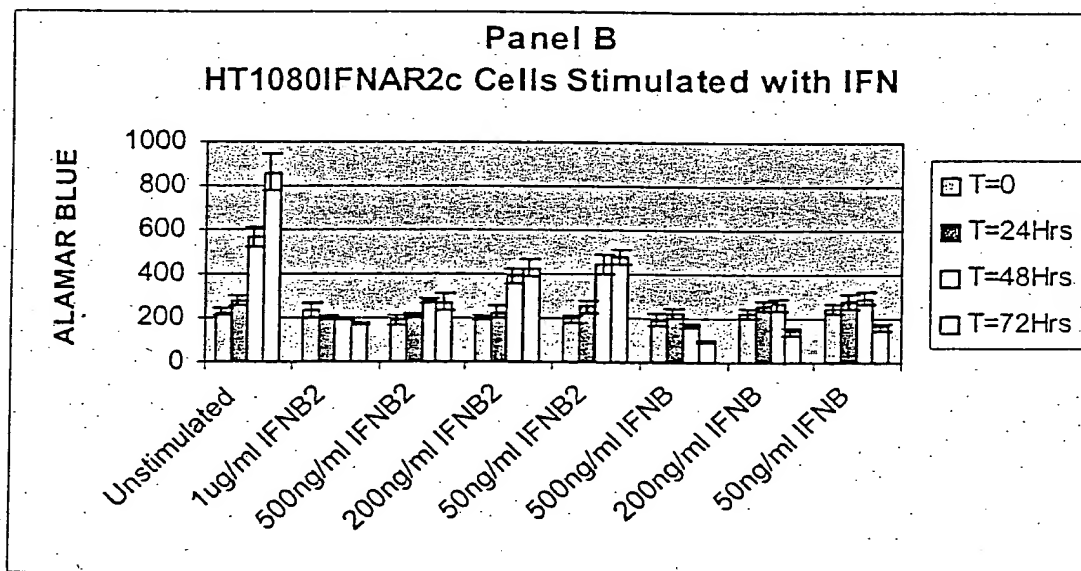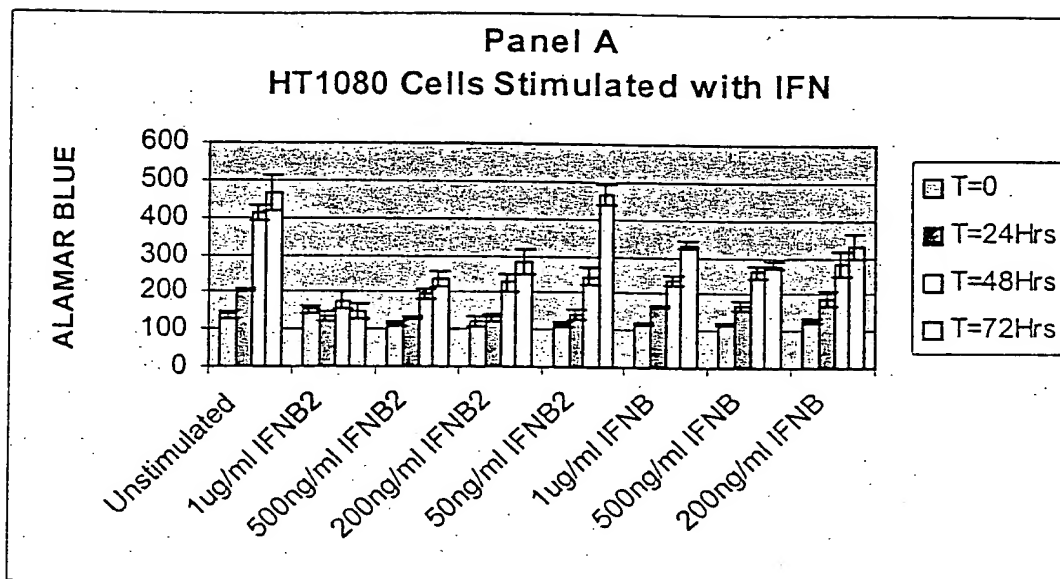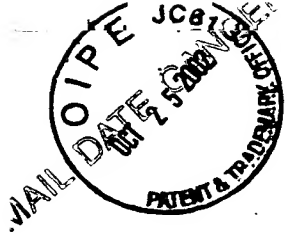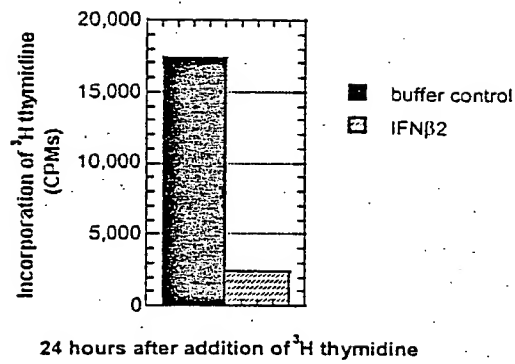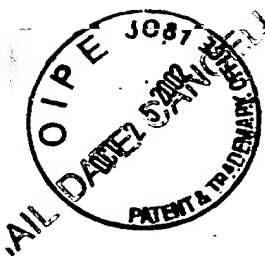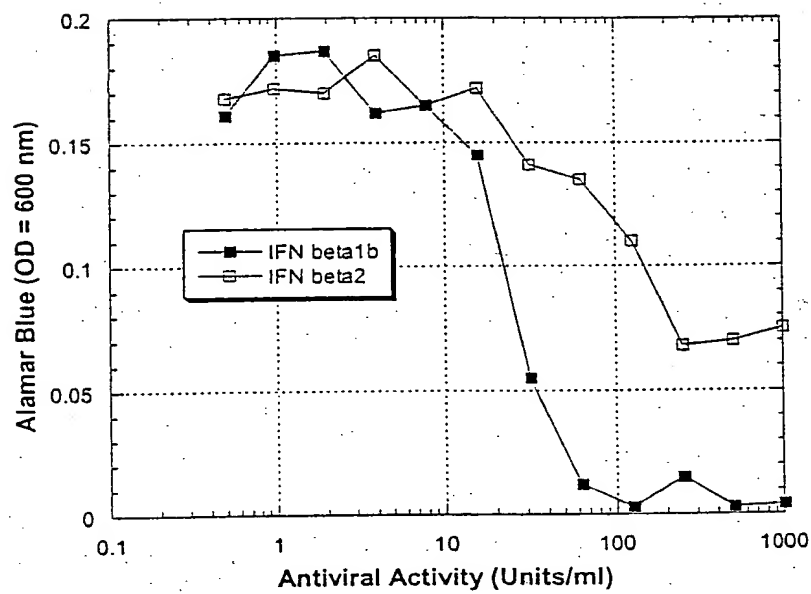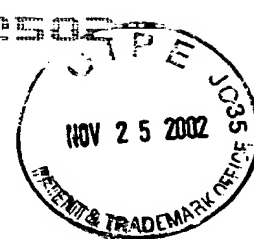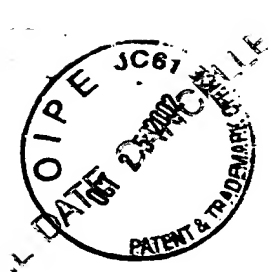
Figure 9

Figure 10

Figure 11

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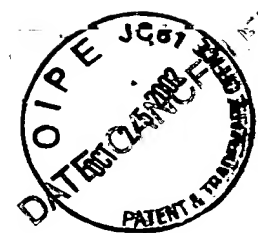
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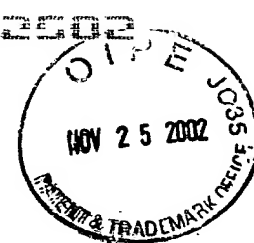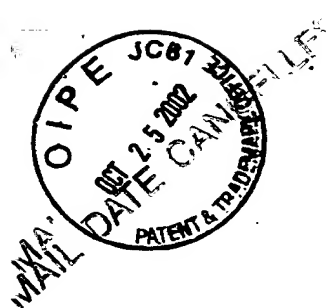
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Figure 13

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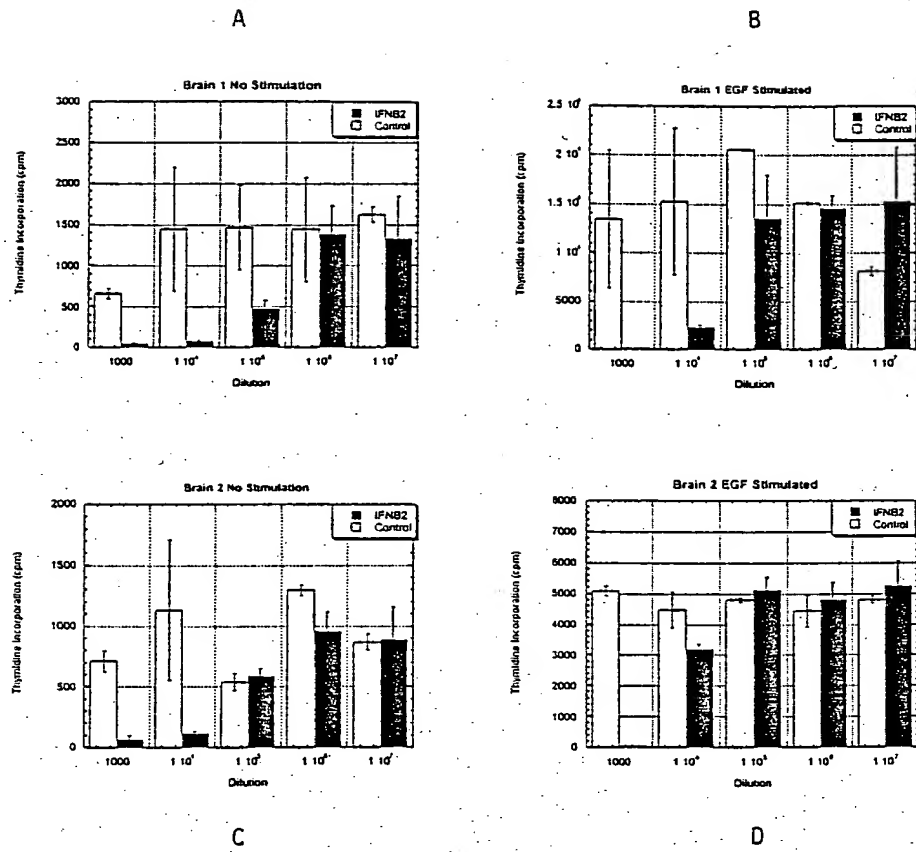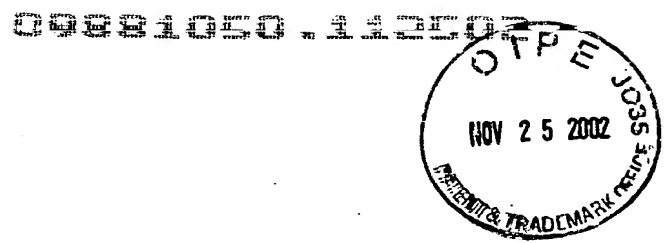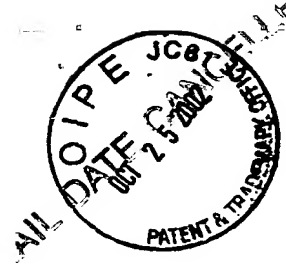QC̲LPHRKNFLLPQKSLSP

Figure 14

A

B

C

D

Figure 15